USE OF EXTRACTION CAKE FROM MILK THISTLE FRUIT FOR THE PRODUCTION OF PIES WITH LOW ENERGY VALUE

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In the article physical-chemical, functional and technological properties of milk thistle fruit are considered. The pies are baked by the collection recipes from culinary products, fillings used in cheese pie.

The prototypes were made from the same raw materials as a check sample, but in the experimental samples extraction cake with milk thistle fruit in number 4, 8, 12% was added. The quality of the finished products was evaluated after full cooling and proofing for 8 ... 10 hours. Organoleptic and physical-chemical parameters (humidity, the rate of recovery, porosity and brittleness) were researched.

The study found that the addition of edible extraction cake from milk thistle fruit 8% positively influence the production of extraction cakes.

Organoleptic evaluation showed that all study samples of flour food products had the correct shape, smooth surface, elastic crumb, with uniformly thin-walled distributed fine pores with a pleasant smell and taste.

All products containing extraction cake with milk thistle fruit in the amount of 4, 8%, are characterized by the presence of a thin crust from light to dark-brown. These products meet the requirements of regulatory documentation and meet the quality and safety of the finished product. Another pattern was observed when making 12% of the extraction cake with milk thistle fruit to raw materials, with the observed lower quality; particularly the pulp acquired a greenish tint. In 12% when chewing, a feeling of humidity increases or lowers the product performance. Specifically, compared with the control, the products containing additives, 8% of moisture content was higher by 4.7%; the index was lower by 13.9%. For the samples with dosages, "extraction cake with milk thistle fruit" in the amount of 12% relatively increased its humidity control by 7.1%, and decreased by 19.3% respectively. Rising humidity and reduced losses characterized water-holding capacity of the additives. According to the regulations, humidity of the pie should not exceed 27%, while the sample with 12% meal is on the verge requirements. Increasing dosage of additives causes the decrease in porosity of the pie. In particular, the content of the "extraction cake with milk thistle fruit" in 8% of porosity products is lower than the control sample, which is 5.0%, and 12% in the presence of additives. However, porosity of the samples is within the range 64 ... 68%, which meets the requirements of regulatory documents.

The prospects for the development of dietary supplements composition for the production of bakery food products are analyzed. The possibility of improving nutritional value of pies by adding extraction cake with milk thistle fruit is considered. Valid use of dietary additives in the technology of cooking pie dough is 8% by the weight of raw materials. Specifically, compared with the control, for the products with the addition of 8% moisture, the content was higher by 4.7% and the
index lower by 13.9%, lower porosity products by 5.0%. The rate decreased slightly lifting cake and fragility rose to 3.5%.

**Keywords:** extraction cake with milk thistle fruit, water-retaining capacity, porosity, brittleness, coefficient of lift, flour culinary products.